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Pholidata articulata Lindl., An Orchid Used in Bone Jointing in Kumaun Region, Western Himalaya

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Abstract

Pholidata articulata Lindl., known locally as 'Harjojan' or bone jointer, is distributed commonly in moist ravines and river valleys up to 1600 m in the Kumaun Himalaya. It is an epiphytic or lithophytic plant. The whole plant is used in traditional medicine.

Key words: *Pholidata articulate*, Harjojan, Kumaun Himalaya, traditional medicine.

Introduction

Orchids are considered by most people to be the most fascinating amongst all the flowering plants. They are members of the family Orchidaceae, one of the largest families of flowering plants (Atwood, 1986). Orchids are not only known for their beauty, but also for their medicinal value, which is why ethnic communities use it regularly in their traditional system of medicine. There are several orchid species that are valued as febrifuge to treat malaria, in removal of tapeworms and other intestinal parasites etc. They are also used either in the form of ointment or poultice for treatment of skin diseases such as boils, pimple, rashes, eruptions and skin lesions. Its roots, seeds, leaves, flowers and stems are used in various ways for their curative powers. Perhaps Chinese were the first to cultivate and describe these wonderful orchids and they were almost certainly the first to describe the orchids for their medicinal use. Reinikka (1995) reports a Chinese legend that Shen-nung described Bletilla striata and a Dendrobium species in his Materia Medica of the 28th century B.C. Shen-nung's herbal 'cures' may have been published many times, but certainly the most remembered are the publications in 1600 in the Pun-tsae, a pharmacopoeia (Kong et al, 2003 and Guthrie, 1945).

Confucius (551–479 BC) called the orchid (lan in Chinese) the 'King of Fragrant Plants', and Chinese literature indicated that they stood for many things: 'retirement, friendship, perfection, numerous progeny, all things feminine, noble and elegant' and some of these themes echoed in Europe too. In Europe, the Greeks referred to testicles as orchis, and Theophrastus (372–286 BC) named the orchids from that word, as the underground tubers of many European terrestrial orchids resemble a pair of testicles. In his Enquiry into Plants, he reported that the orchids had medicinal properties.

In India the medicinal properties of orchids have been used since Vedic period. Ashtawarga" – a group of 8 drugs in the Ayurvedic system, which are used for preparation of tonics, such as 'Chyavanprash', consists of 4 orchid species. Around 40 other species are being used in indigenous systems of medicine. 12 species of orchids are used in traditional medicine in Uttarakhand (Jalal et al. 2008).

The genus *Pholidota* is represented by 46 species in the world (Govaerts, 2003) distributed from tropics and subtropics to South West Pacific. In India, *Pholidota* has 9 species recorded from Western Ghats, North-Eastern Himalaya and Western Himalaya. In Kumaun region two species of this genus occurs (Deva & H.B.Naithani, 1986; Pangtey et al. 1991). *Pholidata articulata* Lindl. locally known as 'Harjojan' or bone jointer is distributed commonly in moist ravines and river valleys up to 1600 m in the Kumaon region. It is an epiphytic or lithophytic plant (Fig. 1). The pseudobulbs are 5-10 cm length; new ones arising near the apex of the old, jointed, branching and furrowed. Leaves are usually two, tapering to each end, many-nerved, membranous, narrowly oblong, sessile or shortly petiolate. Flowers are brownish-pink.

Materials and Methods

Kumaun Himalaya occupies in the central sector of Indian Himalaya and lies between 28°44'-30° 49' N Latitudes and 78° 45'- 81° and 01' E Longitudes. It lies at the eastern end of the Western Himalaya. The area includes six districts viz., Almora, Nainital, Pithoragarh, Champawat, Bageshwar and Udham Singh Nagar.

An ethnobotanical survey was undertaken between the years 2006 and 2008. Local people were interviewed to get information about this species. A total of 60 people were interviewed through questionnaires to collect information on the informant's name, sex, age, village, vernacular name and uses. Also the local 'Vaidyas' were interviewed to get the correct information as well as for the purpose of verification.

A. Habitat **of** *Pholidata articulata*. **B.** Close-up of the flowers.

Fig. 1. Flowering details and habitat of *Pholidata articulata.*

Results and Discussion

The whole plant is used in traditional medicine. The plant is ground into a paste and mixed with the paste of soaked rice. When it has been mixed well, the juice of raw organic turmeric is added. Later on, little warm water is added, blended well and applied to the part where the bone has fractured. The area is bandaged with a piece of cotton cloth. There are others who also prefer to use it as a gum because the pseudobulbs contain thick gum-like substance.

Ancient systems of medicine, which include folk remedies, herbal drugs etc. have been a part of every civilization and society. These systems believe in naturally uprooting the cause of the ailment and hence have negligable side effects. These exceptional ways of treatment are passed down through generations with certain amount of additions and subtractions so as to suit the flavour of the social evolution. This particular rural region is no exception but unlike other civilizations, which have been preyed upon by the ‘quick to cure by suppression’ allopathic system of pills and injections, these people have remained loyal to their medical culture. Sometimes when we explore the botanical assets

of such remote rural areas, we are lucky to find these therapeutic treasures that act beyond our expectation. The present investigation has successfully thrown light on the therapeutic use of *Pholidata articulate* as a bone jointer. Further studies are in the pipeline to understand the chemical composition of this species while nobody knows how many other species wait in anonymity to be recognized as the forgotten vintage miracle cures.

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